REMARKS

Claims 1-15 and 19-25 are all the claims pending in the application. Claims 4, 6, 11, 13, 22 and 24 stand rejected on prior art grounds. Claims 1, 2, 5, 8, 9, 12, 15, 19, 20, and 23 are objected to. Claims 1-6, 8, 9, 11-13, 15, and 19-24 are amended herein. No new matter is being added. Applicants respectfully traverse the rejections and objections based on the following discussion.

I. The Objections to the Specification

The abstract is objected to because of informalities. As such, Applicants have amended the abstract to remove the offending language in accordance with the suggestions in the Office Action. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw these objections.

II. The Objections to the Claims

Claims 1, 2, 5, 8, 9, 12, 15, 19, 20, and 22-24 are objected to because of informalities. Applicants have amended claims 1, 2, 5, 8, 9, 12, 15, 19, 20, and 22-24 to reword the offending language in accordance with the suggestions in the Office Action. Moreover, Applicants have amended claims 3 and 21 to provide proper antecedent basis for the claimed language. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw these objections.

III. The Prior Art Rejections

Claims 4, 11 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Callaway, Jr., et al. (U.S. Patent No. 6,275,500), hereinafter referred to as Callaway, in view of Ray, et al. (U.S. Patent No. 6,587,455), hereinafter referred to as Ray, and in further view of Karaoguz, et al. (U.S. Publication No. 2002-0059434), hereinafter referred to as Karaoguz. Claims 6, 13 and 24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Callaway, Jr., in view of Ray, and in further view of Mitra, et al. (U.S. Patent No. 6,331,986), hereinafter referred to as Mitra. Applicants respectfully traverse these rejections based on the following discussion.

Callaway, Jr. teaches a transceiver device (50) acting as a master (2) among a plurality of communication devices (1 and 12) potentially acting as slaves to the master (2). The transceiver device (50) includes a transmitter (68), a receiver (54) coupled to the transmitter (68), and a processor (58) coupled to the transmitter (68) and the receiver (54). The processor (58) is programmed to poll the slaves at a first interval and then receive a communication request while polling from a first slave of the plurality of communication devices to communicate with at least a second slave of the plurality of communication devices. The master (2) then designates communication parameters for communication between the first slave and at least the second slave and then polls at a re-polling interval the first slave and at least the second slave to confirm the termination of communication between the first slave and at least the second slave.

Ray teaches a method, apparatus, and system for dynamic allocation of a network address associated with a virtual subnet (302) to a network device (100) having a transceiver (102) coupled to a network (304) for broadcasting an address server query message (602) in response to initialization of the network device (100) and an address server (200) coupled to the network

(304) sending the network address associated with a virtual subnet (302) to the network device (100) in response to the address server (200) receiving the address server query message (602).

Karaoguz teaches techniques for controlling and managing network access are used to enable a wireless communication device to selectively communicate with several wireless networks. A portable communication device constructed according to the invention can communicate with different networks as the device is moved through the areas of coverage supported by the different networks. As a result, the device can take advantage of services provided by a particular network when the device is within the area of coverage provided by that network. Thus, the device can selectively switch to networks that provide, for example, high speed Internet access, different quality of service, low cost service and/or different services (e.g., voice, data, multimedia, etc.). A multi-mode controller in the device may be used to alternately poll different networks to determine whether the device is within the area of coverage of a network and to selectively establish communications with those networks.

Mitra teaches a method for solving the joint problem of optimal routing and optimal bandwidth allocation in a network that supports plural subnetworks and plural communication services. Mitra involves, for each source-destination pair communicating via a given subnetwork and a given class of service, determining a traffic rate to be offered to each of a set of permissible routes between that source and that destination, in the given subnetwork and service class. Mitra further involves allocating a respective bandwidth to each link of each subnetwork. Significantly, the determinations of traffic rate to be offered, and the allocations of bandwidth to respective links of subnetworks, are performed in a mutually responsive manner.

However, Callaway, Ray, Karaoguz, nor Mitra teach "wherein at least one Super-master-designate is selected from said Master-designate and at least one Proxy-Slave is selected for each

Master-designate," as provided by amended independent claims 4, 6, 11, 13, 22, and 24. In fact, there is no suggestion in any of Callaway, Ray, Karaoguz, or Mitra of this particular manner of defining the Super-master designate, which is different from the mere master node(s) defined in Callaway. Specifically, the claimed invention uses a deterministic methodology to decide on the final set of masters and slaves so as to efficiently assign slaves to masters. Thereafter, a "Super-master" is elected, which is required for counting the actual number of masters and for collecting information about all the nodes. This aspect of the claimed invention also corrects the effect of the randomness introduced in the previous stage of the method according to the invention, whereby the election of the Super-Master may be interleaved with the cluster formation, thereby enhancing communication speed of the ad hoc network formation. This "Super-master" node formation is a novel aspect of the claimed invention, which the prior art of record is silent on.

Furthermore, even if each of Callaway, Ray, and Karaoguz; and Callaway, Ray, and Mitra were legally combinable, they would still fail to teach the novel aspects of the invention. The invention provides a much more streamlined approach and a simpler concept than the proposed combination of Callaway, Ray, and Karaoguz; and Callaway, Ray, and Mitra. Therefore, the invention is different from Callaway, Ray, and Karaoguz; and Callaway, Ray, and Mitra, whether alone or in combination with one another, and moreover, the invention is unobvious in light of the restrictive teachings of Callaway, Ray, Karaoguz, and Mitra.

As such, independent claims 4, 6, 11, 13, 22, and 24 are amended herein to further describe the invention and to further distinguish the invention from the cited prior art of record. Moreover, the Applicants note that all claims are properly supported in the specification and accompanying drawings, and no new matter is being added.

Therefore, Applicants respectfully submit that the cited prior art do not teach or suggest

the features defined by amended independent claims 4, 6, 11, 13, 22, and 24 and as such, claims 4, 6, 11, 13, 22, and 24 are patentable over Callaway, Ray, Karaoguz, and Mitra, alone or in combination with one another. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections.

IV. Formal Matters and Conclusion

With respect to the objections to the specifications and claims, the specification and claims have been amended, above, to overcome these objections. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the objections to the specification and claims.

In view of the foregoing, Applicants submit that claims 1-15 and 19-25, all the claims presently pending in the application, are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.

Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0441.

Respectfully submitted,

Dated: 6/24/04

Mohammad S. Rahman
Registration No. 43,029
McGinn & Gibb, P.L.L.C.

2568-A Riva Road, Suite 304
Annapolis, MD 21401
Voice: (301) 261-8625
Fax: (301) 261-8825
Customer Number: 29154